

CLAIMS

1. A method of transmitting a multimedia content from a server to a client device through a distribution network upon request of said client device,
said method using a plurality of groups of at least one set of files, each group being associated with an encoded multimedia content, said encoded multimedia contents being
5 obtained by encoding said multimedia content with various encoder characteristics, said groups being obtained by slicing said encoded multimedia contents in at least one set of slicing positions forming slices that can be decoded independently of each other, each file containing a slice of an encoded multimedia content,
said method comprising:

10 - a step of selecting a group from said plurality of groups,
- a step of selecting a slice, and
- a step of downloading, from said server to said client device, the file that contains the selected slice and belongs to the selected group,
said steps being executed at least once.

15 2. A method as claimed in claim 1, further comprising a step of calculating an estimation of the current transmission rate of the distribution network, wherein said group selection step takes said estimation into account.

20 3. A method as claimed in claim 1 or 2, further comprising a step of transmitting a client preference relating to said encoder characteristics from said client device to said server, and wherein said group selection step takes said client preference into account.

4. An encoding system comprising :

25 - a plurality of encoders with various encoder characteristics for encoding a multimedia content, thereby generating a plurality of encoded multimedia contents, and
- a plurality of slicers for slicing said encoded multimedia contents in at least one set of slicing positions forming slices that can be decoded independently of each other, and for enclosing each slice of an encoded multimedia content in a file, thereby generating a plurality
30 of groups of at least one set of files, each group being associated with an encoded multimedia content.

5. A server having access to a plurality of groups of at least one set of files, each group being associated with an encoded multimedia content, said encoded multimedia contents being obtained by encoding a multimedia content with various encoder characteristics, said groups being obtained by slicing said encoded multimedia contents in at least one set of
5 slicing positions forming slices that can be decoded independently of each other, each file containing a slice of an encoded multimedia content, said server comprising:

- means for selecting a slice,
- means for downloading the file that contains the selected slice and belongs to a selected group,

10 said means being activated at least once upon reception of a request directed to said multimedia content from said client device.

6. A server as claimed in claim 5, further comprising means for receiving information relating to the current transmission rate of the distribution network from said client device,
15 and group selection means for selecting said group on the basis of said information.

7. A server as claimed in claim 5, further comprising means for receiving client preference data, and group selection means for selecting said group on the basis of said client preference data.

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8. A client device comprising:

- means for connecting to a server through a distribution network,
- means for selecting a group of at least one set of files from a plurality of groups, each group being associated with an encoded multimedia content, said encoded multimedia contents
25 being obtained by encoding a multimedia content with various encoder characteristics, said groups being obtained by slicing said encoded multimedia contents in at least one set of slicing positions forming slices that can be decoded independently of each other, each file containing a slice of an encoded multimedia content,

30 - means for sending at least one request to said server, said request being directed to said multimedia content and comprising an indication of the selected group.

9. A client device as claimed in claim 8, further comprising means for calculating an estimation of the current transmission rate of said distribution network, and wherein said group selection means take said estimation into account.

10. A client device as claimed in claim 8 or 9, further comprising means for getting a client preference, and wherein said group selection means take said client preference into account.

5 11. A network system comprising:

- a plurality of encoders with various encoder characteristics for encoding a multimedia content, thereby generating a plurality of encoded multimedia contents,
 - a plurality of slicers for slicing said encoded multimedia contents in at least one set of slicing positions forming slices that can be decoded independently of each other, and for
 - 10 enclosing each slice of an encoded multimedia content in a file, thereby generating a plurality of groups of at least one set of files, each group being associated with an encoded multimedia content,
 - a distribution network,
 - a client device having means for connecting to a server through said distribution network,
 - 15 and means for sending at least one request to said server, said request being directed to said multimedia content, and
 - a server having access to said plurality of groups, said server comprising:
 - a) means for selecting a slice,
 - b) means for downloading the file that contains the selected slice and belongs to a selected
 - 20 group,
- said means being activated at least once upon reception of a request directed to said multimedia content from said client device.